

1a	Residue/Position	1	2	3	4	5	6	7	8	9	10	11	12
	A	1	3	2	0	8	0	0	0	0	0	1	2
	C	2	2	3	8	0	8	0	0	0	2	0	2
	G	1	2	3	0	0	0	8	0	5	4	5	2
	T	4	1	0	0	0	0	8	3	2	2	2	2
	SUM	8	8	8	8	8	8	8	8	8	8	8	8

1b		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			2	1										1								
					2	1	2	1	2	1	2	1				1		1		1		1
					2	1	2			3	5	4	2	2	2	6	3	2	1	3	2	2

1c p-value
 0.01953125
 See python file for work

22 23 24 25 26 27 28 29 30

1 1 2 1 2 1 1 1